



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/582,179	09/17/2007	Masanori Ogawa	2710/76418	9218
7590 Donald S Dowden Cooper & Dunham 1185 Avenue of the Americas New York, NY 10036		02/11/2008	EXAMINER TORRES VELAZQUEZ, NORCA LIZ	
			ART UNIT 1794	PAPER NUMBER
			MAIL DATE 02/11/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/582,179

**Applicant(s)**

OGAWA ET AL.

**Examiner**

Norca L. Torres-Velazquez

**Art Unit**

1794

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 3-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 September 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/08)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 5 depends on a canceled claim (claim 2). For examining purposes, the Examiner assumes that it depends on claims 1 or 3. ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 3-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over SERAFINI (US 4,935,295) in view of HOLTROP et al. (US 4,851,283).

SERAFINI discloses composite structure made by needling individual webs of initially spunbonded material and then needle-punching a stack of the individual webs. (Abstract) The reference teaches the use of thermal-bonded nonwoven, sheeting material. For example, spunbonded polypropylene and polyester. (Refer to Col. 2, lines 63-68) The reference teaches the use of spunbonded webs with basis weight ranging from less than 20 gsm to more than 200 gsm. (Col. 3, lines 42-47) The diameter of the needles used is of 2.8 mm and teaches that the spunbonded webs are needled in a concentration of 50 to 300 stitches per square centimeter. The reference also teaches that the exact degree of needling will vary with the kind and thickness of

spunbonded web which is used. (Col. 4, lines 30-36) SERAFINI also teaches that the needed webs can be used to envelop materials coated with or containing an additive such as a sustained or slow release chemical agent. (Col. 4, lines 64-68) It is also noted that the reference discloses that a single web can be used in the practice of the invention. (Col. 2, lines 4-5) With regards to the holes diameter, it is well settled that determination of optimum values of cause effective variables such as pore size is within the skill of one practicing the art. In re Boesch, 205 USPQ 215 (CCPA 1980). Using needles with thinner size will produce pores/holes of smaller diameter while also maintaining the strength of the material.

It is the Examiner's interpretation that the nonwoven web taught by SERAFINI reads on the presently claimed nonwoven fabric made of a nonwoven fabric manufactured by a spunbonding method, with a multiplicity of holes formed on it by a needle punching method. While the reference recognizes the use of coatings, it is silent to the particular use of an impregnation in the needle-punched spunbonded nonwoven.

However, nonwoven fabrics with a thermoplastic resin coating/impregnation are well known, as disclosed by JP '035. The JP '035 publication discloses an interior material that comprises needle-punched nonwoven cloth of synthetic resin fiber and a coating layer comprising a thermoplastic resin. The reference further teaches using such material for laminating with foamed polypropylene sheet for a ceiling, door trim, trunk room, etc, providing high adhesion with the foam polypropylene layer. (Refer to English abstract)

Thus, it would have been obvious to one having ordinary skill in the art of laminated materials to use a synthetic resin impregnation or coating to achieve the predictable result of a material that could be laminated to other components and provide it with good adhesion in

molded applications such as door trims or trunk room. *KSR International Co. V. Teleflex Inc.*, 550 U.S., 82 USPQ2d 1385 (2007).

4. Claims 1, 3 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 04-222265 A in view of JP 09-25469 A.

The JP '265 reference discloses a nonwoven fabric obtained by forming a plurality of holes in a piece of long-fiber nonwoven fabric by means of needles with a diameter of 0.05 to 5.00 mm (refer to claims), the reference further indicates that the long-fiber nonwoven fabric is a spun-bonded nonwoven fabric (refer to examples). It is the Examiner's interpretation that the invention of the JP'265 reference can be considered to have holes of similar sizes (i.e. 0.05 to 5.00 mm). The reference is silent to impregnating the nonwoven fabric with a thermoplastic resin. It is the Examiner's position that nonwoven fabrics impregnated with a resin are well known in the art. The JP'469 reference teaches that nonwoven fabrics impregnated with resins are useful as interior finishing materials. Therefore, it would have been obvious to one having ordinary skill in the art to apply a resin to the needle-punched nonwoven fabric to achieve the predictable result of producing a material with good adhesion when laminated to other layers in a composite. *KSR International Co. V. Teleflex Inc.*, 550 U.S., 82 USPQ2d 1385 (2007).

#### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

JP 11-335955 A – discloses a nonwoven fabric obtained by subjecting a spunbonded nonwoven to a needle punching process.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Norca L. Torres-Velazquez whose telephone number is 571-272-1484. The examiner can normally be reached on Monday-Thursday 8:00-5:00 pm and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Norca L. Torres-Velazquez/  
Primary Examiner, Art Unit 1794